ATTACHMENT 1 TO ANNEX A

PRODUCT SPECIFICATION

COLLABORATIVE FURNITURE

1.0 Certifications

1.1 For requirements designated as a LEED certified project, only products that meet the following certifications will be selected at contract award (call-up).

i. Forest Stewardship Council® (FSC) certified;
ii. GREENGUARD® Certified; and
iii. Contribute to LEED® certification.

Proof of certification or supporting documentation must be provided at time of call-up.

1.2 For other requirements (non-LEED certified), certifications listed in 1.1 are not mandatory.

2.0 Standards

The Offered Product(s) must meet all the standards and requirements listed in this section for the concerned product. All references to the publications refer to the latest issue.

2.1 General Standards Board
i) CAN/CGSB-44.227 Free-standing Office Desk Products and Components.
ii) CAN/CGSB 12.1-2017Tempered or Laminated Safety Glass.

2.2 American National Standards Institute – Business Institutional Furniture Manufactures Association (ANSI/BIFMA)
i) ANSI/BIFMA X5.9 Storage.
ii) ANSI/BIFMA X5.5 Desk/Table Products.
iii) ANSI/BIFMA X5.3 Vertical Files
iv) ANSI/BIFMA x5.9 compliancy, to prevent tipping when doors and drawers are in the open position.

2.3 American National Standards Institute / National Particleboard Association (ANSI/NPA)
i) ANSI A 208.1- 2009 Particleboard
ii) ANSI/HPVA HP-1-2016. American National Standard for Hardwood and Decorative Plywood
iii) ANSI Z97.1-2015. Safety Glazing Materials Used in Buildings – Safety Performance Specifications and Methods of Test.
iv) ANSI/NEMA LD 3-2005. High-Pressure Decorative Laminates.

2.4 Underwriter Laboratory Inc. (UL).
i) UL 1286-2011, Section 35 Standards for Office Furnishings.

2.5 Architectural Woodwork Manufacturers Association of Canada (AWMAC).

2.6 CAN/ULC-S102-10. Standard Method of Test for Surface Burning Characteristics of building Materials and Assemblies

3.0 Testing Requirements

The Offered Product(s) must meet all the test requirements listed in this section. All references to the test methods refer to the latest issue.

3.1 All freestanding office desk products and components must be tested and components must meet

the acceptance levels as described in ANSI/BIFMA X5.5 – Desk/Table Products and CAN/CGSB-44.227-2008 - (Freestanding / lighting Office Desk Products and Components).

3.2 Ancillary products must be tested and meet the American National Standards Institute (ANSI) ANSI/BIFMA X 5.5 American National Standard for supported and freestanding components.

3.3 The chemical and particle emissions of the furniture proposed must meet Section 7.6.1 of ANSI/BIFMA X 7.1-2007 (Standard for Formaldehyde and TVOC Emissions of Low- emitting Office Furniture Systems and Seating).

3.4 The finishes must meet the standards from the American Society for Testing and Materials (ASTM)

i) ASTM D3359 - Standard Test Method for Measuring Adhesion by Tape Test;
ii) ASTM D3363 - Standard Test Method for Film Hardness by Pencil Test. Scratch Resistance - The finish must meet the requirements of ASTM D3363, hardness H; and
iii) ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials.

3.5 The adhesion rating of the painted metal finish must be at least 4B when tested in accordance with ASTM D 3359, Method B.

3.6 All vertical filing and storage products must be tested and meet the acceptance levels as indicate by the American National Standards Institute (ANSI) ANSI/BIFMA X 5.9 American National Standard for Office Furnishings-Storage Units Test.

3.7 Vertical files must be according to the American National Standards Institute (ANSI) ANSI/BIFMA X 5.3 American National Standard for Office Furnishings – Vertical Files Tests.

3.8 American Association of Textile Chemists and Colorists (AATCC) EP1-2007 - Grey Scale for Color Change – Instructions.

3.9 All fabrics (upholstery and wrapped panels) must perform and pass all applicable testing as specified by the Association for Contract Textiles (ACT).

3.10 High pressure decorative laminate (HPDL) must meet CAN3 A172 or ANSI/BIFNEMA LD3.

3.11 All other surfaces, must meet the performance requirements for laminates, painted wood or painted non-wood.

4.0 Wood Veneer Specifications

4.1 Workmanship: Wood veneer surfaces and edges must be smoothly sanded and free of blemishes or defects such as tool or machine marks, sanding marks, surplus glue, raised grain, de-lamination or watermarks.

4.2 Red streaks, wild grain, worm holes and improper cut are not permitted.

4.3 Face veneers must be tightly joined, properly matched and similar in grain pattern or colour throughout any given area.

4.4 Wood core surfaces must be of a balanced construction to prevent warping

5.0 General Fabric Specifications

5.1 Fabrics must meet the following category requirements of ACT (Association for Contract Textiles): Wet + Dry Crocking, Physical Properties, Flammability; and Colorfastness to Light as listed below:

i) Flammability: California Technical Bulletin 117-2013 Section 1 – Pass
ii) Wet and Dry Cocking: Woven Fabrics AATCC 8
    (1) Dry Crocking, Grade 4 minimum
    (2) Wet Crocking, Grade 3 minimum

iii) Colorfastness: Woven Fabrics AATCC 16 Option 1 or 3, Grade 4 minimum at 40 hours*
iv) Physical Properties:
    (1) Pilling ASTM D3511 (Brush Pill), Class 3 minimum
        Or
        ASTM D4970, (Martindale Tester), Class 3 minimum
        Pilling is the formation of fuzzy balls of fiber on the surface of a fabric that remain attached to the fabric.

    (2) Breaking Strength
        ASTM D5034 (Grab Test), 50 lbs. minimum in warp and weft
        Breaking strength is the measurement of stress exerted to pull a fabric apart under tension.

    (3) Seam Slippage
        ASTM D4034, 25 lbs. minimum in warp and weft
        Seam Slippage is the movement of yarns in a fabric that occurs when it is pulled apart at a seam.

5.2 Fabrics for the seating offered must have an abrasion resistance rating of 100,000 double rubs minimum.

5.3 Fabric offering must be mid-grade range at a minimum

5.4 Fabric must have the option of stain resistant fabric.

5.5 Patterns must align at seams

5.6 All finishes, fabric, fabric colour and pattern to be determined by Technical Authority after contract award upon call-up and would be within all requirements of section within the SOW.

5.7 All samples to be provided for approval by the Technical Authority after contract award.

6.0 General Collaborative Furniture Finish Requirements

6.1 All components are to have the minimum finish requirements as per specified finish requirements in Product Requirements List, Attachment 2 to Annex A.

6.2 Offered Product(s) are to include ALL possible finish options (all fabric grades, laminates options, wood veneer options, metal finish options, etc.) in the product line or series but this offering must include the basic finish requirements needed.

6.3 All samples of minimum finish requirements for laminates, wood, wood veneer and metal finishes as per specified in Product Requirements List, Attachment 2 to Annex A, are to be provided for approval by the Technical Authority upon issuance of a Call-up pursuant to the Standing Offer. Finish cards may be accepted as an alternate.

6.4 Fabric sample cards are not required. All fabric samples are to be provided for approval by the Technical Authority after contract award.

7.0 Collaborative Furniture Specifications by Type

7.1 Collaborative Furniture

7.1.1 All Collaborative Furniture components must have the required specifications as per the listed requirements in Product Requirements List, Attachment 2 to Annex A.